

SEQUENCE LISTING

<110> Ness, Jon
Mark Welch
Giver, Lorraine
Cherry, Joel
Borchert, Torben
Stemmer, Willem
Minshull, Jeremy

<120> Subtilisin Variants

<130> 10181.210-US

<160> 201

<170> PatentIn version 3.1

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gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttccggg tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360
tgacaaaaac aacagacgtg caaacttttc tcagtatggg acaggaattg acatcgtagc	420
accagggggt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtag	480
atctatggct actccacatg tcgccggcgt cgccgcacta gt	522

<210> 24
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 24	
gtcgactcaa gatgggaacg ggcacgggac gcacgttgca gggacaatcg ctgctctaaa	60
caattcaata ggcgtactgg gtgttcgacc gaatgcagaa ttatatgcag ttaaagtact	120
tggtgcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300

cggttctggt tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac	360
tgaccaaaac aacaaccgcg ctagcttttc acagtatgga gctgggcttg acattgtcgc	420
gccaggtgtc aatgtgcaga gcacataccc aggttcaaca tatgacagct taagtggcac	480
ttcaatggca acgcctcacg tcgccggcgt cgccgcacta gt	522

<210> 25
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 25	
gtcgactcaa gatgggaatg ggcacgggac gcatgtggcc ggaacagtag cagctcttaa	60
taattcaatc ggtgtgattg gtgtggcacc aagtgtgat ctatacgctg taaaagtact	120
tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttccggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc	420
accagggggt aatgtacaaa gtacgtatcc gggaggtcaa tacgctgagc taagcggaac	480
ctcaatggcc tcaccacacg tcgccggcgc cgccgcacta gt	522

<210> 26
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 26	
gtcgactcaa gatgggaacg ggcacgggac gcatgtggcc ggaacagtag cagctctaaa	60
caattcaata ggcgtacttg gtgttgacc gaatgcagaa ttatatgctg ttaaagtact	120
tggagcaagt ggttctggat caatcagtgg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300

cggttccggt tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc	420
accagggggt gaaattgaaa gcacctaccc aggaagctct tatgacagct taagaggcac	480
ttcaatggca acgcctcacg tcgccggcgc cgccgcacta gt	522

<210> 27
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 27	
gtcgactcaa gatgggaacg ggcacgggac gcacgttgca ggaacgattg cggctctgga	60
taatgacgaa ggtgttggtg gcgtagcgcc aaatgcggat ctatacgctg taaaagtact	120
tggagcaa at ggttagaggaa gcgttagtggt aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttccggt tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc	420
accagggggt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac	480
atctatggct actccacatg tcgccggcgt cgccgcacta gt	522

<210> 28
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 28	
gtcgactcaa gatggcaatg ggcacgggac gcatgtagca ggaacaatag ccgctctaaa	60
caattcagta ggcgtactgg gtgtcgcacc gaatgcagat ctatacgctg taaaagtact	120
tggagcaa at ggttagaggaa gcgttagtggt aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttctggt tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360

tgaccaaaac aacagacgtg caaacttttc tcagtatggg acaggaattg acattgttgc	420
acctggcggtt ggcgttcaga gcacataccc aggtaaccgt tatgcaagct taagtggtag	480
gtcaatggcc tctccgcacg tcgccggcgt cgccgcgcta gt	522

<210> 29
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 29	
gtcgactcaa gatgggaacg ggcacgggac gcatgtagca ggaacaatag ccgctctaaa	60
caattcaata ggcgtacttg gtgttgcacc gaatgcagaa ttatatgctg ttaaagtact	120
tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttaa	240
gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttccggg tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggg acaggaattg acatcgtagc	420
accagggggt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtag	480
atctatggct actcctcatg ttgcagggtgc ggccgcacta gt	522

<210> 30
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 30	
gtcgactcaa gatgggaacg ggcacgggac gcacgttgct ggaacgattg cggctcttaa	60
taattcaatc ggtgtgattg gtgtggcacc gaatgctgac ttatatgctg ttaaagtact	120
cggagcaaat ggaagcggaa gtgtaagtgg gattgctcga ggttttagagt gggcggcaac	180
caataacatg catattgcga acatgagtct cggtagtgat tttcctagct ctacacttga	240
gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttctggg tcagttggct atcctgctcg ttatgccaac gcaatggctg taggagcgac	360

tgaccaaaac aacagacgtg caaacttttc tcagtatggg acaggaattg acatcgtagc	420
accagggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac	480
ttcaatggca actcctcacg tcgccggcgt cgccgcacta gt	522

<210> 31
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 31	
gtcgactcaa gatgggaacg ggcacgggac gcacgttgca ggaacagtgg cagctcttaa	60
taactcaatc ggtgtgattg gtgtggcacc aagtgtgat ctatacgctg taaaagtact	120
tggagcaa at ggtagaggaa gcgttagtg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttctggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggg acaggaattg acatcgtagc	420
accagggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac	480
atctatggca actcctcacg tcgccggcgt cgccgcacta gt	522

<210> 32
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 32	
gtcgactcaa gatgggaacg ggcacgggac gcacgttgct ggaacgattg cggctcttga	60
taacgatgaa ggcgttggtg gcgtagcacc aaatgccgat ctttacgcag ttaaggtgct	120
tagcgcattc ggtgccggtt cgattagctc aattgcccga gggcttgaat ggtctggcga	180
aaacggcatg gatattgcca atttgagtct tggcagctct gctccaagcg caactcttga	240
acaagctgtt aacgcagcga catctcgtgg tgtacttggt atcgcagcct ctggtaattc	300
tgggtgctgga tcagttgggt atcctgcacg ttacgcgaat gcgatggcag taggtgcaac	360
tgatcaaaat aacaaccgtg caagcttctc tcaatacggg gcaggtcttg atattgtcgc	420

tcctggcgta ggtgttcaaa gcacataccc aggttcaaca tatgccagct taaacggtac	480
atcgatggct actcctcacg tcgccggcgt cgccgcacta gt	522

<210> 33
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 33	
gtcgactcaa gatggcaatg ggcatgggac gcacgttgca ggaacgattg cggcgctaaa	60
caataatgtt ggtgtacttg gtgttgcgcc taacgttgag ctttatgggtg ttaaagtact	120
tggagcaagt ggttctggat caatcagtgg aattgcacaa gggttgcaat gggctggtaa	180
taatggaatg catatagcta atatgagcct tggacttct gcaccaagcg caactcttga	240
acaagctgtt aacgcagcga catctcgtgg tgtacttgtt atcgcagcct ctggtaattc	300
tgggtgctgga tcagttgggt atcctgcacg ttacgcgaat gcgatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc	420
acctggagtt aacgtacaaa gtacgtatcc aggaaaccgt tatgtgagta tgaatggtac	480
atctatggcc actccacacg tcgccggcgt cgccgcacta gt	522

<210> 34
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 34	
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taattcaatc ggtgtgattg gtgtggcacc aagtgtgat ctatacgctg taaaagtact	120
tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc	180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga	240
gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa	300
cggttccggg tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac	360
tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc	420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480
atctatggct actccacacg tcgccggcgt cgccgcacta gt 522

<210> 35
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 35
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taattcaatc ggtgtgattg gtgtggcacc aagtgtgat ctatacgtg taaaagtact 120
tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180
gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240
gcgtgcagtc aactacgca caagccaagg tgtactagtt attgcagcga ctggttaaca 300
cggttccggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360
tgacaaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420
accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480
ttcaatggca actcctcacg tcgccggcgt cgccgcacta gt 522

<210> 36
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 36
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taataacgat ggcgttcttg gcgttgacc gaacgttgat ctgtatgcag ttaaagttct 120
gggcgcaaac ggcagaggct caatttcagg cattgcacgg ggcttgcaat gggcagcaga 180
taatggcacg catgttgcaa atctgtcact gggcacagat caaccgtcaa caaactgga 240
acgggcagtt aattatgcaa catcacggg cgttctgggt gttgcagcaa caggcaatac 300
cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caaacttttc acaatatggc gcaggcattg atattgttgc 420
accgggcggt aatgtccaat caacatatcc gggcaacaca tacgtttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 37
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 37
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 taatagcggtt ggcgttcttg gcgttgcacc gagcggtgaa ctgtatgcag ttaaagttct 120
 gggcgcaaac ggcagaggct caatttcagg cattgcacag ggcctggaat gggcaggagc 180
 aaatggcatg catattgcaa atatgtcact gggcacatct gcaccgtcat caacactgga 240
 acgggcagtt aattcagcag catcacgggg cgttctgggtt gttgcagcat caggcaataa 300
 cggcgcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaaat aatagaagag caaacttttc acaatatggc gcaggccttg acattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac 480
 atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 38
 <211> 522
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic

<400> 38
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
 taatagcgat ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120
 gggcgcaaac ggcagaggct caatttcagg cattgcacgg ggcttggaat gggcagcaaa 180
 taatggcatg catgttgcaa atatgtcact gggcacagat caaccgtcag caacactgga 240
 acgggcagtt aatcaagcaa catcacaggg cgttctgggtt attgcagcaa caggcaataa 300
 cggctcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 39
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 39
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60
taataacatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120
gggcgcaagc ggcagaggct caatttcagg cattgcacgg ggcctggaat gggcaggaga 180
taatggcatg catgttgcaa atctgtcatt gggcacagat caaccgtcag caacactgga 240
acgggcagtt aatgcagcaa catcacaggg cgttctgggtt attgcagcaa caggcaatag 300
cggctcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagctcttc acaatatggc acaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgaacggcac 480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 40
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 40
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagtcg cagcactgaa 60
taataacatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120
gggcgcaagc ggcagaggct cagtttcagg cattgctcgg ggcctgcaat ggacagcaga 180
taatggcatg catattgcaa atctgtcact gggctcatct tcaccgtcag caacactgga 240
acgggcagtt aattatgcaa catcacgggg cgttctgggtt attgcagcaa caggcaatac 300
cggcgcaaggc acaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac 480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 41
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 41
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60
 taatagcatt ggcgttcttg gcgttgacc gagcgctgat ctgtatggag ttaaagttct 120
 gggcgcaagc ggcagaggct caatttcaag cattgcacgg ggcttgcaat gggcagcaga 180
 taatggcatg catgttgcaa atctgtcact gggctcagat tttccgtcag caacactgga 240
 acgggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
 cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaaat aataatagag caagcttttc acattatggc gcaggccttg atattgttgc 420
 accgggcggt ggcgttcaat caacatatcc gggcaacaca tatgcttcac tgaacggcac 480
 atcaatggca accccgcatg ttgcaggcgt tgctgcacta gt 522

<210> 42
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 42
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
 taataacgtt ggcgttcttg gcgttgacc gagcgttgat ctgtatgcag ttaaagttct 120
 gggcgcaagc ggcagaggct cagtttcaag cattgcacag ggcttggaat gggcagcaac 180
 taataatatg catgttgcaa atctgtcact gggctcatct caaccgtcat caacactgga 240
 acaggcagtg aatgcagcaa catcacgggg cgttctgggt attgcagcat caggcaataa 300
 cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaaat aataatagag caagcttttc acattatggc acaggccttg atattgttgc 420
 accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480
 atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 43
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 43
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 taatagcggtt ggcgttcttg gcgttgccacc gagcgctgaa ctgtatgcag ttaaagttct 120
 gggcgcaagc ggcagaggca cagtttcagg cattgcacgg ggcttgcaat gggcagcaga 180
 taatggcatg catgttgcaa atctgtcact gggcacacct caaccgtcag caacactgga 240
 acgggcagtt aatcaagcaa catcacgggg cgttctgggtt attgcagcat caggcaatac 300
 cggctcaggc acagtttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc 420
 accgggcggtt ggcgttcaat caacatatcg gggcagcaca tatgcctcac tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 44
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 44
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60
 taatagcggtt ggcgttcttg gcgttgccacc gaacgctgat ctgtatggag ttaaagttct 120
 gggcgcaagc ggcagaggca caatttcaag cattgcacgg ggcttggaat gggcaggagc 180
 aaatggcatg catgttgcaa atctgtcact gggcacatct tcaccgtcat caacactgga 240
 acaggcagtt aatcaagcaa catcacgggg cgttctgggtt gttgcagcat caggcaatac 300
 cggctcaggc acagtttagct atccggcaac atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caaacttttc acaatatggc accggccttg atattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttctc tgaacggcac 480
 atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 45
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 45
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 taataacggtt ggcgttcttg gcgttgcacc gagcgtgaa ctgtatggag ttaaagttct 120
 gggcgcaagc ggcagcggct caatttcagg cattgcacgg ggcctggaat gggcagcagc 180
 aaatggcatg catgttgcaa atatgtcact gggcacacct tttccgtcag caaactgga 240
 acaggcagtt aaagcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
 cggcgcaggc tcaattagct atccggcaag atatgcaa gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caagcttttc acaatatggc acaggcattg atattgttgc 420
 accgggcggtt ggcgttaaat caacatatcc gggcagcaca tatgtttcac tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 46
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 46
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 taataacggtt ggcgttcttg gcgttgcacc gagcgtgaa ctgtacgcag ttaaagttct 120
 gggcgcaaac ggcagcggca cagtttcaag cattgcacag ggcctggaat gggcaggaaa 180
 taatggcatg catgttgcaa atctgtcact gggcacagat caaccgtcag caaactgga 240
 acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatac 300
 cggtcaggc tcagttggct atccggcaag atatgcaa gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caaacttttc acaatatggc gcaggccttg atattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcaacaga tatgcttcaa tgaacggcac 480
 atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 47

<211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 47
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 taataacatt ggcgttcttg gcgttgcacc gagcgctgaa ctgtatgcag ttaaagttct 120
 gggcgcaagc ggcagaggct cagtttcaag tattgcacag ggcctggaat gggcaggaga 180
 taatggcatg catgttgcaa atctgtcact gggctcacct tttccgtcat caacactgga 240
 acgggcagtt aatgcagcaa catcacgggg cgttctgggtt attgcagcat caggcaatag 300
 cggctcaggc tcaattagct atccggcaag atatgcgaat gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caaactcttc acaatatggc gcaggccttg agattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgtctcaa tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 48
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 48
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 taataacggtt ggcgttattg gcgttgcacc gaacgttgaa ctgtatggag ttaaagttct 120
 gggcgcaaac ggcagaggca caatttcaag cattgcacgg ggcctggaat gggcagcaaa 180
 taatggcacg catattgcaa atctgtcact gggcacagat caaccgtcag caacactgga 240
 acgggcagtt aatcaagcaa catcacaggc cgttctgggtt attgcagcat caggcaatag 300
 cggctcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caagcttttc acattatggc acaggccttg atattgttgc 420
 accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480
 atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 49
 <211> 522

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 49
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taatagcgtt ggcgttcttg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggca cagtttcaag cattgcacgg ggcctggaat gggcagcaga 180
taataatatg catattgcaa atctgtcact gggcacagat caaccgtcag caacactgga 240
acaggcagtt aatgcagcaa catcacaggg cgttctgggt gttgcagcat caggcaataa 300
cggctcaggc tcaattggct atccggcaag atatgcaa gcaatggcag ttggcgcaac 360
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accgggcgtt ggcgttcaat caacatatcc gggcaacaca tatgtttcac tgagcggcac 480
atcaatggca acaccgatg ttgcaggcgc tgcagcacta gt 522

<210> 50
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 50
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taataacggtt ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggca caatttcagg cattgcacag ggcctggaat gggcaggaga 180
taatggcatg catgttgcaa atctgtcact gggctcagat caaccgtcag caacactgga 240
acaggcagtt aatgcagcaa catcacaggg cgttctgggt gttgcagcat caggcaatag 300
cggctcaggc tcagttggct atccggcaag atatgcaa gcaatggcag ttggcgcaac 360
agatcaaaaat aataatagag caagcttttc acaatatggc caaggccttg atattgttgc 420
accgggcgtt ggcgttcaat cgacatatcc gggcagcaga tatgttcaa tgagcggcac 480
atcaatggca tcaccgatg ttgcaggcgt tgcagcacta gt 522

<210> 51
<211> 522
<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 51

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taatagcatt ggcgttcttg gcgttgcacc gagcgttgat ctgtatgcag ttaaagttct	120
gggcgcaaac ggcagaggca cagtttcagg cattgcacag ggcctggaat gggcagcaga	180
taaaggcatg catgttgcaa atctgtcact gggctcatct tcaccgtcaa caacactgga	240
acaggcgggt aatgcagcaa catcacaggg cgttctgggt attgcagcaa caggcaatag	300
cggcgagggc tcaattagct atccggcaag atatgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc caaggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 52

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 52

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taataacgat ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggca cagtttcaag cattgcacga ggcctggaat gggcagcaaa	180
taatggcatg catgttgcaa atatgtcact gggcacacct gcaccgtcaa caacactgga	240
acgggcagtt aatcaagcaa catcacgggg cgttctgggt attgcagcat caggcaataa	300
cggctcaggc tcaattagct atccggcaag atatgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 53

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 53

gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taatagcggtt ggcgttttttg gcgttgcacc gagcgttgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagcggca cagtttcaag cgttgcacag ggcttgcaat gggcaggaga	180
taatggcatg catgttgcaa atctgtcact gggctcagat gcaccgtcag caaactgga	240
acaggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatac	300
cggcgcaaggc acagttggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 54

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 54

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taatagcggtt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagcggct caatttcagg cattgcacgg ggcttggaat gggcagcaga	180
taataatacg catgttgcaa atctgtcact gggctcagat tttccgtcag caaactgga	240
acgggcagtt aattatgcaa catcacgggg cgttctgggt gttgcagcat caggcaatac	300
cggctcaggc acaattggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaaat aatagaagag caagcttttc acaatatggc acaggccttg atattgttgc	420
accgggcggtt ggcgttcaat cgacatatcc gggcagcaga tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 55

<211> 522

<212> DNA

<213> Artificial Sequence

<220>
 <223> Synthetic

<400> 55
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 taatagcgat ggcgttattg gcgttgcacc gagcgctgaa ctgtatgcag ttaaagttct 120
 gggcgcaaac ggcagcggct cagtttcagg cattgcacgg ggcttggaat gggcaggagc 180
 aaatggcatg catgttgcaa atctgtcact gggcacagat caaccgtcag caaactgga 240
 acaggcagtt aatcaagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
 cggtcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc 420
 accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatacttcac tgagcggcac 480
 atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 56
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 56
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 taataacatt ggcgttattg gcgttgcacc gaacgttgaa ctgtatgcag ttaaagttct 120
 gggcgcaagc ggcagcggct cagtttcaag cattgcacgg ggcttgcaat gggcagcaaa 180
 taatggcatg catattgcaa atctgtcact gggctcatct gcaccgtcag caaactgga 240
 acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
 cggcgaggc tcaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattcttgc 420
 accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac 480
 atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 57
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 57

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taatagcggtt ggcgttcttg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcagg cattgcacag ggtctggaat gggcagcaga	180
taatggcatg catgttgcaa atatgtcact gggcacagat tttccgtcag caaactgga	240
acaggcagtt aatgcagcaa catcacggga cgttctgggt gttgcagcaa caggcaatac	300
cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaacttttc acaatatggc acaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgtttcaa tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 58

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 58

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taatagcggtt ggcgttcttg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcaag cattgcacgg ggcctggaat gggcagcaaa	180
taatggcatg catgttgcaa atctgtcact gggctcacct tttccgtcat caaactgga	240
acgggcagtt aattatgcaa catcacggga cgttctgggt attgcagcaa caggcaatag	300
cggcgcaaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagctcttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 59

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 59
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 taatagcatt ggcgttcttg gcgttgcacc gagcgctgat ctgtatggag ttaaagttct 120
 gggcgcaagc ggcagaggct caatttcaag cattgcacgg ggcctggaat gggcaggaaa 180
 taatggcatg catattgcaa atatgtcact gggctcagat caaccgtcag caaactgga 240
 acgggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
 cggcgcaggc tcagttacct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aatagaagag caagcttttc acattatggc gcaggccttg atattgttgc 420
 accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 60
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 60
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 taataacggt ggcgttattg gcgttgcacc gagcgctgaa ctgtatgcag ttaaagttct 120
 gggcgcaagc ggcagcggca caatttcagg cattgcacag ggcctgcaat gggcagcaga 180
 taatggcacg catgttgcaa atctgtcact gggctcagat tttccgtcat caaactgga 240
 acaggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaataa 300
 tggctcaggc tcagtttagct atccggcagg gtatgcaaat gcaatggcag ttggcgcaac 360
 agatcaaaat aatagaagag caagctcttc acaatatggc gcaggccttg atattgtcgc 420
 accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480
 atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 61
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 61
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taataacgat ggcgttcttg gcgttgacc gagcgctgat ctgtatggag ttaaagttct 120
gggcgcaaac ggcagaggct cagtttcagg cattgcacgg ggcttggaat gggcagcaga 180
taatggcatg catgttgcaa atatgtcact gggcacatct gcaccgtcag caaactgga 240
acaggcagtt aatcaagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
cggcgcaggc acaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc 420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tcaacggcac 480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 62
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 62
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taatagcatt ggcgttcttg gcgttgacc gagcgctgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggca cagtttcaag cattgcacag ggcctggaat gggcagcaaa 180
taatggcacg catgttgcaa atctgtcact gggcacacct tcaccgtcaa caaactgga 240
acgggcagtt aattatgcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
cggcgcaggc tcagtttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgc 420
accggccggt aatgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac 480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 63
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 63

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taatagcgat ggcgttattg gcgttgccacc gaacgctgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggca cagtttcagg cattgcacag ggcctggaat gggcagcagc	180
aaatggcatg catgttgcaa atatgtcact gggcacacct caaccgtcag caacactgga	240
acgggcagtt aatgcagcaa cctcacaggc cgttctgggt gttgcagcat caggcaataa	300
cggctcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagctcttc acaatatggc acaggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 64
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 64	
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taatagcatt ggcgttcttg gcgttgctcc gaacgctgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagcggca cagtttcagg cattgcacgg ggcctggaat gggcagcaaa	180
taatggcatg catattgcaa atatgtcact gggcacagat gcaccgtcat caacactgga	240
acaggcagtt aattcagcaa catcacaggc cgttctgggt attgcagcaa caggcaatag	300
cggcgccaggc acaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagcttttc acaatatggc acaggcattg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 65
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 65	
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taatagcatt ggcgttcttg gcgttgcacc gaacgctgaa ctgtatggag ttaaagttct	120
gggcgcaaac ggcagcggct caatttcagg catagcacgg ggcttgggaat gggcaggaaa	180
taatggcatg catattgcaa atctgtcact gggcacagat tcaccgtcag caaactgga	240
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cggctcaggc acagttggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
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accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 66
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 66	
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gggcgcaaac ggcagaggca caatttcaag cattgcacgg ggcttgggaat gggcaggaga	180
taatggcatg catgttgcaa atctgtcact gggctcacct gcaccgtcag caaactgga	240
acaggcagtt aatcaagcaa catcacgggg cgttctgggtt attgcagcat caggcaataa	300
cggctcaggc tcagtttagct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagctcttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 67
 <211> 522
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic

<400> 67	
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gggcgcaagc ggcagaggca caatttcagg cattgcacag ggcttggaat gggcagcaga	180
taatggcatg catgttgcaa atctgtcact gggcacatct gcaccgtcag caaactgga	240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggcgaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc	420
acccggcggtt ggcgttcaat caacatatcc gggcaacaca tatgcttcaa tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 68
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 68	
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taataacggtt ggcgttcttg gcgttgcacc gagcgctgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggca cagtttcaag cattgcacgg ggcttgcaat gggcaggaga	180
taatggcatg catgttgcaa atatgtcact gggcacatct tttccgtcag caaactgga	240
acaggcagtt aatgcagcaa catcacaggc cgttctgggt gttgcagcat caggcaatac	300
cggctcaggc tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaacttttc acaatatggc acaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 69
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 69	
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taatagcggtt ggcgttcttg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct	120

gggcgcaagc ggcagaggct cagtttcagg cattgcacag ggcttggaat gggcagcagc	180
aaatggcatg catgttgcaa atatgtcact gggctcagat gcaccgtcag caaactgga	240
acgggcagtt aatcaagcaa catcacgggg cgttctgggt attgcagcaa caggcaataa	300
cggctcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggt aatgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 70
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 70	
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taataacgat ggcgttcttg gcgttgacc gaacgctgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagcgga cagtttcagg cattgcacag ggcttggaat gggcagcaga	180
taatggcacg catattgcaa atctgtcact gggcacacct caaccgtcag caaactgga	240
acgggcagtt aaatcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggcgaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 71
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 71	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taatagcgat ggcgttattg gcgttgacc gagcgctgat ctgtatggag ttaaagttct	120

gggcgcaaac ggcagcggct caatttcagg cattgcacag ggcttggaat gggcagcagc	180
aaatggcatg catgttgcaa atatgtcact gggcacatct tttccgtcat caaacttga	240
acaggcagtt aatgcggcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggcgccaggc acagtttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcaacaga tgtgtttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 72
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 72	
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taataacggtt ggcgttcttg gcgttgcacc gagcgttgat ctgtatgcag ttaaagttct	120
gggcgcaaac ggcagcggca caatttcagg cattgcacag ggcttggaat gggcagcaaa	180
taatggcatg catgttgcaa atatgtcact gggctcacct gcaccgtcag caaacttga	240
acgggcagtt aatcaagcaa catcacgggg cgttctgggt gttgcagcaa caggcaatag	300
cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgtttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 73
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 73	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taataacgat ggcgttattg gcgttgcacc gagcgttgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagcggct caatttcaag cattgcacgg ggcttggaat gggcagcaga	180

taatggcacg catattgcaa atatgtcact gggcacacct caaccgtcag caaactgga	240
acgggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggctcaggc tcagttagct atccggcaag atatgcaa at gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattcttgc	420
accgggcggtt ggggttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca tcaccgatg ttgcaggcgt tgcagcacta gt	522

<210> 74
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 74	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taatagcatt ggcgttcttg gcgttgacc gagcgctgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggca cagtttcagg cattgcacag ggcttggaat gggcaggaaa	180
taataatatg catgttgcaa atctgtcact gggctcagat tttccgtcat caaactgga	240
acgggcagtt aatgcagcaa catcacggga cgttctgggt gttgcagcat caggcaatac	300
cggctcaggc tcaattagct atccggcaag atatgcaa at gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaacttttc acaatatggc caaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac	480
atcaatggca tcaccgatg ttgcaggcgt tgcagcacta gt	522

<210> 75
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 75	
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taatagcgat ggcgttcttg gcgttgacc gagcgttgat ctgtatggag ttaaagttct	120
gggcgcaagc ggcagcggct caatttcagg cattgcacag ggcttgcaat gggcagcaga	180

taatggcatg catgttgcaa atctgtcact gggctcacct caaccgtcag caaactgga	240
acgggcagtt aattatgcaa catcacgggg cgttctgggt gttgcagcaa caggcaatac	300
cggcgcaggc tcagttggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcaacaga tatgtttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 76
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 76	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taataacatt ggcgttcttg gcgttgcacc gaacgttgat ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcagg cattgcacgg ggcctggaat gggcaggaga	180
taatggcatg catgttgcaa atctgtcact gggctcatct caaccgtcag caaactgga	240
acaggcagtt aattcagcaa catcacgggg cgttctgggt attgcagcaa caggcaatac	300
cggcgcaggc acagttagct atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaaccttttc acaatatggc acaggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgaacggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 77
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 77	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taataacatt ggcgttcttg gcgttgcacc gagcgctgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggca cagtttcagg cattgcacag ggcctggaat gggcaggaga	180
taatggcatg catgttgcaa atctgtcact gggcacagat caaccgtcat caaactgga	240

acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatac	300
cgggcgaggc tcaattggct atccggcaag atatgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaacttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac	480
atctatggca acaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 78
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 78	
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taataacggtt ggcgttcttg gcgttgacc gagcgctgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagcggca caatttcaag cattgcacag ggcctggaat gggcaggaac	180
aaatggcacg catattgcaa atctgtcact gggcacagat caaccgtcag caacactgga	240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaataa	300
cggtcaggc tcagttagct atccggcaag atatgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatgtcc gggcaacaga tatgtttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 79
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 79	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taatagcgtt ggcgttcttg gcgttgacc gagcgctgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcaag cattgcacag ggcctggaat gggcagcaga	180
taatggcatg catgttgcaa atatgtcact gggcacatct tttccgtcat caacactgga	240

acgggcagtt aatgcagcaa catcacgggg cgttctgggt attgcagcat caggcaatag	300
cggctcaggc acaattgggt atccgggaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc actggcattg atattgttgc	420
accaggcggtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 80
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 80	
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taataacggtt ggcgttcttg gcgttgacc gagcggtgaa ctgtatgcag ttaaagttct	120
gggcgcaaac ggcagcggca caatttcagg cattgcacag ggcctggaat gggcagcaaa	180
taatggcacg catgttgcaa atctgtcact gggcacagat gcaccgtcag caacactgga	240
acgggcagtt aatcaagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggctcaggc acaattgggt atccggcaag atatgcaa atgcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgctttac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 81
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 81	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taatagcatt ggcgttcttg gcgttgacc gagcgctgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcaag cattgcacag ggcctggaat gggcaggagc	180
aatggcatg catattgcaa atctgtcact gggctcacct gcaccgtcat caacactgga	240
acgggcagtt aattcagcaa catcacgggg cgttctgggt attgcagcaa caggcaatac	300

cggctcaggc tcaattagct atccggcaag atatgcaa	gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagcttttc acaatatggc	gcaggcattg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcaacaca	tatgtttcaa tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta	gt	522

<210> 82
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 82	
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taataacatt ggcgttcttg gcgttgacc gaacgttggt	ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggca cagtttcagg cattgcacgg	ggcctggaat gggcagcaac 180
aaatggcatg catgttgcaa atctgtcact gggctcagat	gcaccgtcag caaactgga 240
acaggcagtt aatcaagcaa catcacggg cgttctggtt	gttgcagcaa caggcaatac 300
cggctcaggc acaattagct atccggcaag atatgcaa	gcaatggcag ttggcgcaac 360
agatcaaaat aatagaagag caaacttttc acaatatggc	caaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcaacaca	tatgtttcaa tgagcggcac 480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta	gt 522

<210> 83
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 83	
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taatagcgat ggcgttcttg gcgttgacc gagcgtgat	ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggct cagtttcaag cattgcacgg	ggcctggaat gggcagcagc 180
aaatggcatg catgttgcaa atctgtcact gggctcagat	caaccgtcat caaactgga 240
acgggcagtt aatgaagcaa catcacagg cgttctggtt	gttgcagcat caggcaataa 300

cggcgcaggc	acagttggct	atccggcaag	atatgcaa	gcaatggcag	ttggcgcaac	360
agatcaaaat	aatagaagag	caagcttttc	acaatatggc	gcaggcctcg	atattgttgc	420
accgggcggt	ggcgttcaat	caacatatcc	gggcagcaca	tatgcttcaa	tgaacggcac	480
atcaatggca	acaccgcatg	ttgcaggcgc	tgccagcacta	gt		522

<210> 84
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 84		
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acatgttgca	ggcacagttg	cagcactgaa
		60
taatagcggt	ggcgttcttg	gcggtgcacc
gagcggtgaa	ctgtatggag	ttaaagttct
		120
gggcgcaaac	ggcagcggtc	caatttcaag
cattgcacgg	ggcctggaat	gggcagcaga
		180
taatggcatg	catattgcaa	atctgtcact
gggctcatct	tttccgtcag	caacactgga
		240
acaggcagtt	aatcaagcaa	catcacgggg
cgttctgggt	attgcggcaa	caggcaatag
		300
cggctcaggc	acagttggct	atccggcaag
atatgcaa	gcaatggcag	ttggcgcaac
		360
agatcaaaat	aataatagag	caaacttttc
acaatatggc	gcaggccttg	atattgttgc
		420
accgggcggt	ggcgttcaat	caacatatac
gggcagcaca	tatgcttcaa	tgaacggcac
		480
atcaatggca	tcaccgcatg	ttgcaggcgc
tgccagcacta	gt	
		522

<210> 85
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 85		
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acatgttgca	ggcacaattg	cagcactgaa
		60
taatagcgat	ggcgttcttg	gcggtgcacc
gaacgttgat	ctgtatggag	ttaaagttct
		120
gggcgcaaac	ggcagcgga	cagtttcagg
cattgcacgg	ggcctgcaat	gggcaggaga
		180
taatggcatg	catgttgcaa	atctgtcact
gggcacagat	gcaccgtcag	caacactgga
		240
acgggcagtt	aatcaagcaa	catcacgggg
cgttctgggt	gttgccagcat	caggcaatac
		300
cggcgccaggc	tcaattagct	atccggcaag
atatgcaa	gcaatggcag	ttggcgcaac
		360

agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatac gggcaacaga tatgtttcaa tgaacggcac 480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 86
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 86
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60
taataacgct ggcgttcttg gcgttgcacc gaacgttgat ctgtatgcag ttaaagttct 120
gggcgcaaac ggcagcggct caatatcagg cattgcacgg ggcctggaat gggcaggaga 180
taatggcatg catgttgcaa atctgtcact gggctcacct caaccgtcag caacactgga 240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaataa 300
cggcgtaggc tcagttagct atccggcaag atatgcaa atgcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caaacttttc acaatatggc acaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tttgcttcac tgaacggcac 480
atcaatggca tctccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 87
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 87
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taataacgctt ggcgttcttg gcgttgcacc gaacgctgaa ctgtatgcag ttaaagttct 120
gggcgcaaac ggcagcggct cagtttcagg cattgcacag ggcctggaat gggcaggagc 180
aatggcatg catgttgcaa atatgtcact gggctcacct tcaccgtcag caacactgga 240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcaa caggcaatag 300
cggcgtaggc tcagttagct atccggcaag atatgcaa atgcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcaacaca tatgtttcac tgaacggcac 480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 88
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 88
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
taataacatt ggcgttcttg gcgttgacc gagcgctgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagcgga caatttcaag cattgctcag ggcctggaat gggcaggagc 180
aaatggcatg catgttgcaa atctgtcact gggcacatct tttccgtcaa caaactgga 240
acgggcagtt aattcagcaa catcacgggg cgttctgggt attgcagcat caggcaatag 300
cggctcaggc acagttggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac 360
agatcaaaat aatagaagag caagctcttc acaatatggc gcaggcctcg atattgttgc 420
accgggcggtt ggcgttcaat caacatatac gggcagcaca tatgtttcac tgagcggcac 480
atcaatggca acacctcatg ttgcaggcgt tgcagcacta gt 522

<210> 89
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 89
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taatagcggtt ggcgttattg gcgttgacc gagcgctgaa ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggca caatttcaag cattgcacgg ggcctggaat gggcagcaaaa 180
taatggcacg catgttgcaa atctgtcact gggctcacct gcaccgtcag caaactgga 240
acgggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcaa caggcaataa 300
cggctcaggc acaattagct atccggcaag atatgcaa atgcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caaactcttc acaatatggc acaggccttg atattgttgc 420

accgggcggtt ggggttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac 480
atcaatggca acacctcatg ttgcaggcgc tgcagcacta gt 522

<210> 90
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 90
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taatagegat ggcgttcttg gcgttgacc gagcggtgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagcggca caatttcaag cattgcacgg ggcttggaat gggcaggaaa 180
taatggcatg catgttgcaa atatgtcact gggctcacct tcaccgtcag caacactgga 240
acgggcagtt aatcaagcaa catcacgggg cgttctggtt gttgcagcaa caggcaatac 300
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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480
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<220>
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 atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
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<220>
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accgggcggtt ggcgttcaat caacatatcc gggcaacaca tatgcttcac tgaacggcac	480
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<400> 113

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taataacatt ggcgttcttg gcgttgccacc gagcgctgat ctgtatgcag ttaaagttct	120
gggcacaagc ggcagcggca cagtttcaag cattgcacgg ggcttggaat gggcagcaag	180
taatggcatg catgttgcaa atatgtcact gggcacatct caaccgtcag caaactgga	240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcaa caggcaatag	300
cggctcaggc acaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaaat aatagaagag caagcttttc acaatatggc acaggccttg atattgttgc	420
accgggcggtt ggcgttaaat caacatatcc gggcagcaca tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 114

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 114

gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taatagcatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct	120
gggcgcaaac ggcagcggca caatttcaag cattgcacgg ggcctggaat gggcaggaaa	180
taatggcatg catgttgcaa atatgtcact gggctcagat tttccgtcat caaactgga	240
acaggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggctcaggc tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caaactcttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgtttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 115

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 115

gtcgacacaa gatggcaatg gacatggcac acatgttaca ggcacaattg cagcactgaa	60
taatagcatt ggcgttattg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggct caatttcagg cattgcacgg ggcctggaat gggcagcaga	180
taatggcatg catgttgcaa atatgtcact gggctcacct caaccgtcag caaactgga	240
acaggcagtt aattcagcaa catcacgggg cgttctgggt attgcagcaa caggcaatag	300
cggctcaggc acaattgcct atccggcaag atatccaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc caaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac	480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 116

<211> 522

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 116
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60
taataacgat ggcgttcttg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct 120
gggcgcaagc ggcagaggca cagtttcaag cattgcacag ggcctgctat gggcagcaaa 180
taatggcacg catgttgcaa atatgtcact gggctcatct gcaccgtcaa caaactgga 240
acgggcagtt aattatgcaa catcacgggg cgttctgggt gttgcagcat caggcaatag 300
cggctcaggc acaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc 420
accgggcggt aatgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac 480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 117
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 117
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taatagcgtt ggcgttattg gcgttgcacc gagcgttgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggct cagtttcagg cattgcacgg ggcctggaat gggcagcaaa 180
taatggcatg catgttgcaa atctgtcact gggctcacct gcaccgtcag caaactgga 240
acgggcagtt aattatgcaa catcacgggg cgttctgggt attgcagcat caggcaatag 300
cggcgcaagg tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagcttttc acaacatggc acaggccttg atattgttgc 420
accgggcggt ggcgttcaat caacatatcc gggcagcaga tatgtttcac tgagcggcac 480
atcaatggca tcaccgcatg ttgcaggcgc tgcagcgcta gt 522

<210> 118
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 118
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taatagcgtt ggcgttcttg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagcggca caatttcagg cattgcacag ggcctggaat gggcagcaaa 180
taatggcacg catgttgcaa atctgtcact gggcacatct caaccgtcag caacactgga 240
acgggcagtt aatgcagcaa catcacaggg cgttctgggt gttgcagcaa caggcaatac 300
cggcgcaggc acaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420
accggggggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 119
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 119
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
taatagcatt ggcgttcttg gcgtcgcacc gagcgttgaa ctgtatgcag ttaaagttct 120
gggcgcaagc ggcagaggct caatttcaag cattgcacgg ggcctggaat gggcaggaga 180
taatggcatg catattgcaa atatgtcact gggcacagat caaccgtcag caacactgga 240
acaggcagtt aatgcagcaa catcacgggg cgttctgggt attgcagcaa caggcaatac 300
cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360
agatcaaaat aataatagag cgaacttttc tcaatatggc gcaggccttg atattgttgc 420
accgggcggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcaa tgaacggcac 480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 120
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 120

gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taataacgat ggcgttcttg gcgttgcacc gaacgttgat ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcagg cattgcacgg ggcctggaat gggcaggagc	180
aatggcatg catattgcaa atatgtcact gggcacatct tttccgtcag caaactgga	240
acaggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcaa caggcaataa	300
cggcgaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagctcttc acaatatggc gcaggccttg atattgttgc	420
accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac	480
atcaatggca acaccgatg ttgcaggcgc tgcagcacta gt	522

<210> 121
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 121	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60
taatagcgat ggcgttattg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcaag cattgcacgg ggcctggaat gggcagcaga	180
taatggcatg catgttgcaa atctgtcact gggctcagat caactgtcaa caaactgga	240
acgggcagtt aatcaagcaa catcacgggg cgttctgggt gttgcagcat caggcaataa	300
cggctcaggc acagtttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagctcttc acaatatggc acaggccttg atattgttgc	420
accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac	480
atcaatggca tcaccgatg tcgcaggcgt tgcagcacta gt	522

<210> 122
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 122	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa	60

taatagcatt ggcgttcttg gcgttgacc gagcgctgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggct cagtttcagg cattgcacag ggcctggaat gggcaggaac	180
aaatggcatg catgttgcaa atatgtcact gggcacacct gcaccgtcag caaactgga	240
acaggcagtt aatgcagcaa catcacaggg cgttctgggt attgcagcat caggcaatag	300
cggctcaggc acagtttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atactgttgc	420
accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 123
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 123	
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taataacatt ggcgttcttg gcgttgacc gagcgttgaa ctgtatggag ttaaagttct	120
gggcgcaagc ggcagcggct cagtttcaag cattgcacag ggcctggaat gggcagcaga	180
taatggcatg catgttgcaa atatgtcact gggctcacct tttccgtcat caaactgga	240
acaggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatag	300
cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc	420
accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 124
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 124	
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taatagcatt ggcgttattg gcgttgcacc gagcggtgat ctgtatggag ttaaagttct	120
gggcgcaagc ggcagcggct cagtttcaag cattgcacgg ggcttgaat gggcaggaga	180
taatggcatg catgttgcaa atctgtcact gggctcacct tcaccgtcag caaactgga	240
acaggcagtt aattcagcaa catcacgggg cgttctgggt attgcagcaa caggcaatac	300
cggcgccaggc acacttagct atccggcaag atatgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caagcttttc acaatatggc accggccttg atattgttgc	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgaacggcac	480
atcaatggca acaccgcatg ttgcaagcgc tgcagcacta gt o	522

<210> 125
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 125	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taatagcgtt ggcgttcttg gcgttgcacc gaacgttgaa ctgtatgcag ttaaagttct	120
gggcgcaagc ggcagaggca caatttcagg cattgcacag ggcttgaat gggcagcaga	180
taatggcacg catattgcaa atctgtcact gggcacatct tttccgtcag caaactgga	240
acgggcagtt aattcagcaa catcacgggg cgttctgggt gttgcagcaa caggcaatac	300
cggcgccaggc tcaattagct atccggcaag atttgcaa gcaatggcag ttggcgcaac	360
agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgg	420
accgggcggt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac	480
atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt	522

<210> 126
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 126	
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taatagcgat ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct	120

gggcgcaaac ggcagcggct cagtttcaag cattgcacag ggcttgaat gggcagcaga 180
 taatggcatg catattgcaa atatgtcact gggcacatct tcaccgtcag taacactgga 240
 acgggcagtt aatgcagcaa catcacaggg cgttctgggt gttgcagcat caggcaatac 300
 cggcgcaggc tcaattggct atccggcaag atatgcaa atgcaatggcag ttggcgcaac 360
 agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgc 420
 accgggcggt aatgttcaat caacatatcc gggcagcaga tatgtttcac tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 127
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 127
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
 taatagcatt ggcgttattg gcgttgcacc gagcgctgaa ctgtatggag ttaaagttct 120
 gggcgcaaac ggcagcggct cggtttcaag cattgcacgg ggcttgaat gggcaggaaa 180
 taatggcatg catattgcaa atctgtcact gggctcagat tttccgtcag caacactgga 240
 acaggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaataa 300
 cggctcaggc tcagttggct atccggcaag atatgcaa atgcaatgggag ttggcgcaac 360
 agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc 420
 accgggcggt ggcgttcaat caacatatcc gggcaacaca tatgtttcac tgaacggcac 480
 atcaatggca acaccacatg ttgcgggcgt tgcagcacta gt 522

<210> 128
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 128
 gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60
 taatagcgat ggcgttattg gcgttgcacc gaacgttgaa ctgtatggag ttaaagttct 120

gggcgcaaac ggcagaggca cagtttcagg cattgcacag ggcctggaat gggcagcagc	180
aaatggcatg catgttgcaa atctgtcact gggctcacct gcaccgtcag caacactgga	240
acaggcagtt aatgcagcaa catcacgggg cgttctgggt attgcagcat caggcaatag	300
cggcgcaggc acagttggct atccggcaag atatgcaa at gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaacttttc acagtatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcaacaca tatacttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 129
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 129	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taataacggtt ggcgttcttg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct	120
ggacgcaagc ggcagaggca caatttcagg cattgcacgg ggcctggaat gggcagcagc	180
aaatggcatg catattgcaa atatgtcact gggctcagat caaccgtcaa caacactgga	240
acgggcagtt aatgcagcaa catcacgggg cgttctgggt gttgcagcat caggcaatac	300
cggctcaggc acagtttagct atccggcaag atatgcaa at gcaatggcag ttggcgcaac	360
agatcaaaat aataatagag caaactcttc acaatatggc gcaggccttg atattgttgc	420
accgggcggtt ggcgttcaat caacatatcc gggcagcaca tatgtcttcac tgagcggcac	480
atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt	522

<210> 130
 <211> 522
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 130	
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa	60
taatagcggtt ggcgttattg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct	120
gggcgcaaac ggcagcggca cagtttcagg cattgcacgg ggcctggaat gggcagcaga	180

taatggcatg catgttgcaa atatgtcact gggctcatct gcaccgtcag caaactgga 240
 acgggcagtt aattcagcaa catcacgggg cgttctggtt gttgcagcaa caggcaatag 300
 cggcgaggc tcaattagct atccggcaag atatgcaa gcaatggcag ttggcgcaac 360
 agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420
 accgggcgtt aatgttcaat caacatatcc gggcagcaga tatgcttcaa tgagcggcac 480
 atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 131
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 131

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ser Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140
 Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

 Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

 <210> 132
 <211> 173
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 132

 Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

 Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

 Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

 Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

 Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

 Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

 Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

 Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

 Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 133
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 133

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 134
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 134

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Gly
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 135
 <211> 172
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 135

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 136

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 136

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Gly Asn Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 137
<211> 173
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 137

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 138

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<220>
 <221> misc_feature
 <222> (20)..(20)
 <223> Xaa in position 20 denotes an unknown amino acid

<400> 138

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Xaa Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 139
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 139

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Thr Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 140

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 140

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 141

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 141

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 142

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 142

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 143

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 143

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 144
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 144

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val

35	40	45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His		
50	55	60
Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu		
65	70	75 80
Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala		
	85	90 95
Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn		
	115	120 125
Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn		
	130	135 140
Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr		
	145	150 155 160
Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu		
	165	170

<210> 145
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 145

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15
Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 146
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 146

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 147
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 147

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asp Asn Ser Val Gly Val Leu Gly Val Ala Pro Glu Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 148

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 148

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala

85

90

95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 149

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 149

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ser Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 150
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 150

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Arg Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 151

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 151

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 152
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 152

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu		
	165	170
<210> 153		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 153		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile		
1	5	10 15
Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala		
	20	25 30
Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile		
	35	40 45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His		
	50	55 60
Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu		
65	70	75 80
Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala		
	85	90 95
Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn		
	115	120 125
Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn		
	130	135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 154
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 154

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Asp Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 155
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Gly Gln Tyr Ala Glu Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 156
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 156

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Glu
 130 135 140

Ile Glu Ser Thr Tyr Pro Gly Ser Ser Tyr Asp Ser Leu Arg Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 157

<211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 157

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 158
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 158

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 159

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 159

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Lys
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 160

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 160

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 161

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 161

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 162

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 162

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 163
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 163

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile

35 40 45
 Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Gly Asn Asn Gly Met His
 50 55 60

 Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

 Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

 Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

 Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

 Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

 Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
 145 150 155 160

 Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

 <210> 164
 <211> 173
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 164

 Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

 Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

 Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 165
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 165

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 166

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 166

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 167
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 167

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Ala Ser Arg Gly Val Leu Val Val Ala Ala

	85		90		95
Ser Gly Asn Asn Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala	100	105	110		
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn	115	120	125		
Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly	130	135	140		
Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr	145	150	155	160	
Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu	165	170			
<210> 168					
<211> 173					
<212> PRT					
<213> Artificial Sequence					
<220>					
<223> Synthetic					
<400> 168					
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val	1	5	10	15	
Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala	20	25	30		
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile	35	40	45		
Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His	50	55	60		
Val Ala Asn Met Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu	65	70	75	80	
Arg Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala	85	90	95		

Thr Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 169
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 169

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 170
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 170

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Thr Ala Asp Asn Gly Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ser Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 171
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 171

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser His Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu		
	165	170
<210> 172		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 172		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val		
1	5	10 15
Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val		
	20	25 30
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val		
	35	40 45
Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His		
	50	55 60
Val Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ser Thr Leu Glu		
65	70	75 80
Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala		
	85	90 95
Ser Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser His Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly		
	130	135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 173
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 173

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Arg Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 174
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 174

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Thr Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 175
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 175

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Lys Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Lys Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 176

<211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 176

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 177
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 177

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Glu Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 178

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 178

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser His Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 179

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 179

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 180

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 180

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 181

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 181

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Lys Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Ser Ser Pro Ser Thr Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 182

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 182

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val

35 40 45
 Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
 50 55 60
 Val Ala Asn Met Ser Leu Gly Thr Pro Ala Pro Ser Thr Thr Leu Glu
 65 70 75 80
 Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95
 Ser Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110
 Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125
 Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140
 Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160
 Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

 <210> 183
 <211> 173
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 183
 Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15
 Ala Ala Leu Asn Asn Ser Val Gly Val Phe Gly Val Ala Pro Ser Val
 20 25 30
 Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
 35 40 45

Ser Ser Val Ala Gln Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 184
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 184

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 185
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 185

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Thr Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 186
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 186

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Ile Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

	85		90		95
Ser Gly Asn Ser Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala					
	100		105		110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser					
	115		120		125
Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Leu Ala Pro Gly Val Gly					
	130		135		140
Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr					
	145		150		155
					160
Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu					
	165		170		
<210> 187					
<211> 173					
<212> PRT					
<213> Artificial Sequence					
<220>					
<223> Synthetic					
<400> 187					
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val					
1	5		10		15
Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala					
	20		25		30
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val					
	35		40		45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His					
	50		55		60
Val Ala Asn Met Ser Leu Gly Thr Asp Phe Pro Ser Ala Thr Leu Glu					
	65		70		75
					80
Gln Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala					
	85		90		95

Thr Gly Asn Thr Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 188
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 188

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 189
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 189

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Thr Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser His Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 190
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 190

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Asp Asn Gly Thr His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Gly Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu		
	165	170
<210> 191		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 191		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val		
1	5	10 15
Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Ala		
	20	25 30
Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val		
	35	40 45
Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His		
	50	55 60
Val Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu		
65	70	75 80
Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala		
	85	90 95
Ser Gly Asn Ser Gly Ala Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly		
130	135	140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 192
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 192

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ser Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Ala Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 193
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 193

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 194
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 194

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Asp Ala Pro Ser Ser Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Ser Gly Ala Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 195

<211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 195

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Ser Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 196
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 196

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 197

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 197

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 198

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 198

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 199

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 199

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 200

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 200

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Lys Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 201
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 201

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile

35	40	45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His		
50	55	60
Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ser Thr Leu Glu		
65	70	75 80
Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala		
	85	90 95
Ser Gly Asn Ser Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly		
130	135	140
Val Gln Ser Thr Tyr Pro Gly Asn Arg Cys Val Ser Leu Ser Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu		
	165	170
<210> 202		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 202		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val		
1	5	10 15
Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val		
	20	25 30
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile		
35	40	45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 203
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 203

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Leu Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 204
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 204

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Val Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asn Asn Asn Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 205
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 205

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85

90

95

Thr Gly Asn Thr Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 206

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 206

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Val
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 207
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 207

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 208
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 208

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Thr Asn Gly Thr His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Cys Pro Gly Asn Arg Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 209
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 209

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Gly Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu		
	165	170
<210> 210		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 210		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile		
1	5	10 15
Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val		
	20	25 30
Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile		
	35	40 45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His		
	50	55 60
Val Ala Asn Leu Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu		
65	70	75 80
Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala		
	85	90 95
Ser Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly		
	130	135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Leu Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 211
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 211

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 212
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 212

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Gly Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 213
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 213

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Glu Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 214

<211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 214

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Thr Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 215
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 215

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Thr Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 216

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 216

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Ala Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Val Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Phe Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 217

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 217

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 218
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 218

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Thr Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 219
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 219

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 220
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 220

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile

35

40

45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 221

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 221

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Ile Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 222
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 222

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Arg
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 223
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 223

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 224
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 224

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85

90

95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Glu Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 225

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 225

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Val Ala Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 226
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 226

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 227
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 227

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Ser Val Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 228
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 228

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Thr Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Thr Gly Ser Arg Tyr Ala Leu Met Ser Gly Thr		
145	150	155 160
Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu		
	165	170
<210> 229		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 229		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val		
1	5	10 15
Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val		
	20	25 30
Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val		
	35	40 45
Ser Gly Ile Val Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His		
	50	55 60
Val Ala Asn Leu Ser Leu Gly Thr Pro Phe Pro Ser Ala Thr Leu Glu		
65	70	75 80
Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala		
	85	90 95
Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly		
	130	135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 230
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 230

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Asn Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Lys Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Asn Gly Ala Gly Thr Ile Cys Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 231
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 231

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ile Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 232
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 232

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Thr Val Gly Tyr Pro Ala Thr Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Thr Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 233

<211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 233

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 234
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic

<400> 234

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 235

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 235

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Pro Ser Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Gly Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 236

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 236

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Pro Ser Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Ser Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 237
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 237

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gly Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Val Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 238

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 238

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ala Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 239
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 239

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val

35 40 45
 Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
 50 55 60
 Val Ala Asn Met Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80
 Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95
 Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110
 Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125
 Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140
 Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160
 Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

 <210> 240
 <211> 173
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 240
 Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15
 Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30
 Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 241
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 241

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Ala Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 242
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 242

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Ile Gly Tyr Pro Ala Thr Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 243
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 243

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Thr Ser Gly Ser Gly Thr Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ser Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85

90

95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Lys Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 244

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 244

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Val Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 245
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 245

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Thr Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Ala Tyr Pro Ala Arg Tyr Pro
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 246

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 246

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Leu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Ser Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 247
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 247

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Phe Ser Gln His Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130	135	140
Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr		
145	150	155 160
Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu		
	165	170
<210> 248		
<211> 173		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 248		
Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val		
1	5	10 15
Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala		
	20	25 30
Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile		
	35	40 45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His		
	50	55 60
Val Ala Asn Leu Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu		
65	70	75 80
Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala		
	85	90 95
Thr Gly Asn Thr Gly Ala Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser		
	115	120 125
Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly		
	130	135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 249
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 249

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 250
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 250

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 251
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 251

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Val
 20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Leu Ser Thr Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
 115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 252

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 252

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Thr Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Thr Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 253
<211> 173
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 253

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 254

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 254

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Leu Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Ser Ala Ala Ala Leu
165 170

<210> 255

<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 255

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
 1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Val
 20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
 35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Thr Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Phe Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Gly Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 256
 <211> 173
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 256

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
 35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
 50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ser Pro Ser Val Thr Leu Glu
 65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
 145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
 165 170

<210> 257
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<220>
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<400> 257

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
 35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
 50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
 65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
 85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
 100 105 110

Asn Ala Met Gly Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
 165 170

<210> 258

<211> 173

<212> PRT

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<220>

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<400> 258

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
 1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Asn Val
 20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Val

35	40	45
Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His		
50	55	60
Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu		
65	70	75 80
Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala		
	85	90 95
Ser Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala		
	100	105 110
Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn		
	115	120 125
Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly		
130	135	140
Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Thr Ser Leu Ser Gly Thr		
145	150	155 160
Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu		
	165	170
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<212> PRT		
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Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile		
1	5	10 15
Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val		
	20	25 30
Asp Leu Tyr Gly Val Lys Val Leu Asp Ala Ser Gly Arg Gly Thr Ile		
	35	40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Gln Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 260
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 260

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 261
<211> 380
<212> PRT
<213> Bacillus

<400> 261

Met Lys Lys Pro Leu Gly Lys Ile Val Ala Ser Thr Ala Leu Leu Ile
1 5 10 15

Ser Val Ala Phe Ser Ser Ser Ile Ala Ser Ala Ala Glu Glu Ala Lys
20 25 30

Glu Lys Tyr Leu Ile Gly Phe Asn Glu Gln Glu Ala Val Ser Glu Phe
35 40 45

Val Glu Gln Val Glu Ala Asn Asp Glu Val Ala Ile Leu Ser Glu Glu
50 55 60

Glu Glu Val Glu Ile Glu Leu Leu His Glu Phe Glu Thr Ile Pro Val
65 70 75 80

Leu Ser Val Glu Leu Ser Pro Glu Asp Val Asp Ala Leu Glu Leu Asp

85										90					95						
Pro	Ala	Ile	Ser	Tyr	Ile	Glu	Glu	Asp	Ala	Glu	Val	Thr	Thr	Met	Ala						
			100					105						110							
Gln	Ser	Val	Pro	Trp	Gly	Ile	Ser	Arg	Val	Gln	Ala	Pro	Ala	Ala	His						
		115					120					125									
Asn	Arg	Gly	Leu	Thr	Gly	Ser	Gly	Val	Lys	Val	Ala	Val	Leu	Asp	Thr						
	130					135					140										
Gly	Ile	Ser	Thr	His	Pro	Asp	Leu	Asn	Ile	Arg	Gly	Gly	Ala	Ser	Phe						
145					150					155					160						
Val	Pro	Gly	Glu	Pro	Ser	Thr	Gln	Asp	Gly	Asn	Gly	His	Gly	Thr	His						
				165					170					175							
Val	Ala	Gly	Thr	Ile	Ala	Ala	Leu	Asn	Asn	Ser	Ile	Gly	Val	Leu	Gly						
			180					185					190								
Val	Ala	Pro	Ser	Ala	Glu	Leu	Tyr	Ala	Val	Lys	Val	Leu	Gly	Ala	Ser						
		195					200					205									
Gly	Ser	Gly	Ser	Val	Ser	Ser	Ile	Ala	Gln	Gly	Leu	Glu	Trp	Ala	Gly						
	210					215					220										
Asn	Asn	Gly	Thr	His	Val	Ala	Asn	Leu	Ser	Leu	Gly	Ser	Pro	Ser	Pro						
225					230					235					240						
Ser	Ala	Thr	Leu	Glu	Gln	Ala	Val	Asn	Ser	Ala	Thr	Ser	Arg	Gly	Val						
			245					250						255							
Leu	Val	Val	Ala	Ala	Ser	Gly	Asn	Ser	Gly	Ala	Gly	Ser	Ile	Ser	Tyr						
			260					265					270								
Pro	Ala	Arg	Tyr	Ala	Asn	Ala	Met	Ala	Val	Gly	Ala	Thr	Asp	Gln	Asn						
		275					280					285									
Asn	Asn	Arg	Ala	Ser	Phe	Ser	Gln	Tyr	Gly	Ala	Gly	Leu	Asp	Ile	Val						
	290					295					300										
Ala	Pro	Gly	Val	Asn	Val	Gln	Ser	Thr	Tyr	Pro	Gly	Ser	Thr	Tyr	Ala						
305					310					315					320						

Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val Ala Gly Val Ala
325 330 335

Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn Val Gln Ile Arg
340 345 350

Asn His Leu Lys Asn Thr Ala Thr Ser Leu Gly Ser Thr Asn Leu Tyr
355 360 365

Gly Ser Gly Leu Val Asn Ala Glu Ala Ala Thr Arg
370 375 380

<210> 262
<211> 173
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<220>
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<223> Xaa denotes Ala or Val

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<222> (41)..(41)
<223> Xaa denotes Gly, Ser or Arg

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<222> (45)..(45)
<223> Xaa denotes Ser, Ala or Arg

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<223> Xaa denotes Ile or Val

<220>
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<222> (50)..(50)
<223> Xaa denotes Gly or Ser

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<223> Xaa denotes Arg or Gln

<220>
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<222> (56)..(56)
<223> Xaa denotes Glu or Gln

<220>
<221> misc_feature
<222> (58)..(58)
<223> Xaa denotes Ala or Ser

<220>
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<222> (59)..(59)
<223> Xaa denotes Gly or Ala

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<222> (60)..(60)
<223> Xaa denotes Glu, Ala, Thr, or Asn

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<223> Xaa denotes Gly or Asn

<220>
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<222> (64)..(64)
<223> Xaa denotes Asp or His

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<222> (68)..(68)
<223> Xaa denotes Leu or Met

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<222> (72)..(72)
<223> Xaa denotes Ser or Thr

<220>
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<223> Xaa denotes Ser or Asp

<220>


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<223> Xaa denotes Ala or Phe

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<222> (77)..(77)
<223> Xaa denotes Ala, Thr, or Ser

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<222> (80)..(80)
<223> Xaa denotes Glu, Lys, or Gly

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<222> (81)..(81)
<223> Xaa denotes Gln or Arg

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<222> (85)..(85)
<223> Xaa denotes Ala or Tyr

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<222> (89)..(89)
<223> Xaa denotes Arg or Gln

<220>
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<222> (90)..(90)
<223> Xaa denotes Asp or Gly

<220>
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<222> (97)..(97)
<223> Xaa denotes Ser or Thr

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<223> Xaa denotes Ser or Asn

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<223> Xaa denotes Ala or Ser

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<223> Xaa denotes Asn or Arg

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<222> (128)..(128)
<223> Xaa denotes Ser or Asn

<220>
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<222> (134)..(134)
<223> Xaa denotes Ala or Thr

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<222> (136)..(136)
<223> Xaa denotes Leu or Ile

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<223> Xaa denotes Gly, Arg, or Asn

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<223> Xaa denotes Gln or Arg

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<222> (152)..(152)
<223> Xaa denotes Gly, Asn, Ser, or Thr

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<223> Xaa denotes Arg, Ser, Thr, or Gln

<220>

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 <223> Xaa denotes Val, Ala, or Asp

<220>
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 <222> (156)..(156)
 <223> Xaa denotes Glu, Arg, or Ser

<220>
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 <222> (157)..(157)
 <223> Xaa denotes Leu or Met

<220>
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 <223> Xaa denotes Asn, Ser , or Arg

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 <223> Xaa denotes Ser or Thr

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 <223> Xaa denotes Ala or Val

<400> 262

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Xaa
 1 5 10 15

Ala Ala Leu Xaa Asn Xaa Xaa Gly Val Xaa Gly Val Ala Pro Xaa Xaa
 20 25 30

Xaa Leu Tyr Xaa Val Lys Val Leu Xaa Ala Xaa Gly Xaa Gly Ser Xaa
 35 40 45

Ser Xaa Ile Ala Xaa Gly Leu Xaa Trp Xaa Xaa Xaa Asn Xaa Met Xaa
 50 55 60

Ile Ala Asn Xaa Ser Leu Gly Xaa Xaa Xaa Pro Ser Xaa Thr Leu Xaa
 65 70 75 80

Xaa Ala Val Asn Xaa Ala Thr Ser Xaa Xaa Val Leu Val Ile Ala Ala
85 90 95

Xaa Gly Asn Xaa Gly Xaa Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Xaa Arg Ala Xaa
115 120 125

Phe Ser Gln Tyr Gly Xaa Gly Xaa Asp Ile Val Ala Pro Gly Val Xaa
130 135 140

Xaa Xaa Ser Thr Tyr Pro Gly Xaa Xaa Tyr Xaa Xaa Xaa Xaa Gly Thr
145 150 155 160

Ser Met Ala Xaa Pro His Val Ala Gly Xaa Ala Ala Leu
165 170

<210> 263
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 263
agtaccagg acgga

15

<210> 264
<211> 10
<212> PRT
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<220>
<223> Synthetic

<400> 264

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu
1 5 10

<210> 265
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 265

Ala Ala Leu Gln Asn Ala Leu Gly Val Val
1 5 10

<210> 266

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 266

Ala Ala Leu Gln Asn Thr Val Gly Val Met
1 5 10

<210> 267

<211> 175

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 267

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
 115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
 130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
 145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu Val Lys
 165 170 175

<210> 268
 <211> 193
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 268

Gly Ala Ser Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly
 1 5 10 15

His Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asp Asn Ser Glu
 20 25 30

Gly Val Leu Gly Val Ala Pro Asn Ala Asp Leu Tyr Ala Val Lys Val
 35 40 45

Leu Gly Ala Ser Gly Ser Gly Ser Ile Ser Gly Ile Ala Gln Gly Leu
 50 55 60

Glu Trp Ala Gly Glu Asn Gly Met His Ile Ala Asn Leu Ser Leu Gly
 65 70 75 80

Ser Ser Ala Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Tyr Ala Thr
 85 90 95

Ser Gln Gly Val Leu Val Ile Ala Ala Ser Gly Asn Ser Gly Ala Gly
 100 105 110

Ser Val Gly Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala

115		120		125											
Thr	Asp	Gln	Asn	Asn	Asn	Arg	Ala	Ser	Phe	Ser	Gln	Tyr	Gly	Ala	Gly
130						135					140				
Leu	Asp	Ile	Val	Ala	Pro	Gly	Val	Gly	Val	Gln	Ser	Thr	Tyr	Pro	Gly
145					150					155					160
Asn	Arg	Tyr	Ala	Ser	Leu	Asn	Gly	Thr	Ser	Met	Ala	Thr	Pro	His	Val
				165					170					175	
Ala	Gly	Val	Ala	Ala	Leu	Val	Lys	Gln	Lys	Asn	Pro	Ser	Trp	Ser	Asn
		180						185					190		

Val

<210> 269
 <211> 193
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 269

Gly	Ala	Ser	Phe	Val	Pro	Gly	Glu	Pro	Ser	Thr	Gln	Asp	Gly	Asn	Gly
1				5					10					15	
His	Gly	Thr	His	Val	Ala	Gly	Thr	Ile	Ala	Ala	Leu	Asn	Asn	Ser	Ile
			20					25					30		
Gly	Val	Leu	Gly	Val	Ala	Pro	Asn	Ala	Asp	Leu	Tyr	Ala	Val	Lys	Val
		35					40					45			
Leu	Gly	Ala	Asn	Gly	Ser	Gly	Ser	Val	Ser	Gly	Ile	Ala	Gln	Gly	Leu
	50					55					60				
Glu	Trp	Ala	Ala	Ala	Asn	Asn	Met	His	Ile	Ala	Asn	Met	Ser	Leu	Gly
65					70					75					80
Ser	Asp	Ala	Pro	Ser	Ala	Thr	Leu	Glu	Gln	Ala	Val	Asn	Tyr	Ala	Thr
			85						90					95	

Ser Arg Gly Val Leu Val Ile Ala Ala Thr Gly Asn Asn Gly Ser Gly
100 105 110

Ser Val Gly Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala
115 120 125

Thr Asp Gln Asn Asn Arg Arg Ala Asn Phe Ser Gln Tyr Gly Thr Gly
130 135 140

Ile Asp Ile Val Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly
145 150 155 160

Asn Arg Tyr Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val
165 170 175

Ala Gly Val Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn
180 185 190

Val

<210> 270
<211> 193
<212> PRT
<213> Bacillus

<400> 270

Gly Ala Ser Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly
1 5 10 15

His Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile
20 25 30

Gly Val Leu Gly Val Ala Pro Ser Ala Glu Leu Tyr Ala Val Lys Val
35 40 45

Leu Gly Ala Ser Gly Ser Gly Ser Val Ser Ser Ile Ala Gln Gly Leu
50 55 60

Glu Trp Ala Gly Asn Asn Gly Met His Val Ala Asn Leu Ser Leu Gly
65 70 75 80

Ser Pro Ser Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Ser Ala Thr
85 90 95

Ser Arg Gly Val Leu Val Val Ala Ala Ser Gly Asn Ser Gly Ala Gly
100 105 110

Ser Ile Ser Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala
115 120 125

Thr Asp Gln Asn Asn Asn Arg Ala Ser Phe Ser Gln Tyr Gly Ala Gly
130 135 140

Leu Asp Ile Val Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly
145 150 155 160

Ser Thr Tyr Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val
165 170 175

Ala Gly Ala Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn
180 185 190

Val